FIG. 1

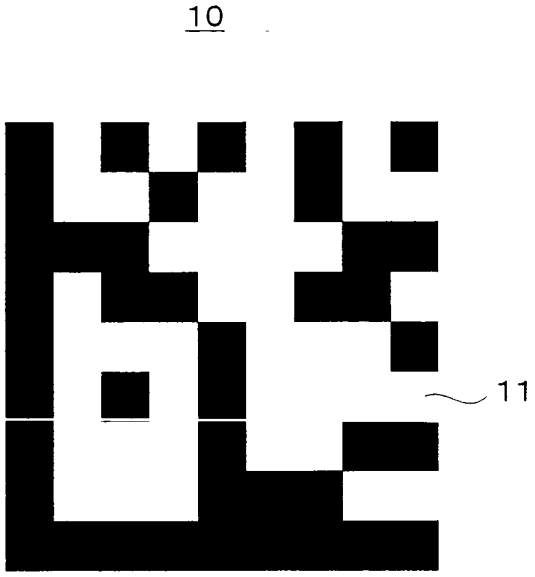

FIG. 2

FIG. 3

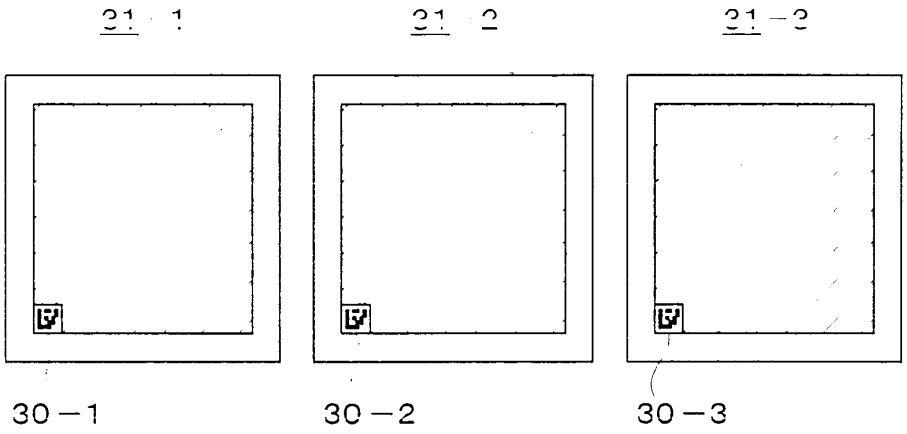
31-1
31-2
31-3
30-1
30-2
30-3

FIG. 4

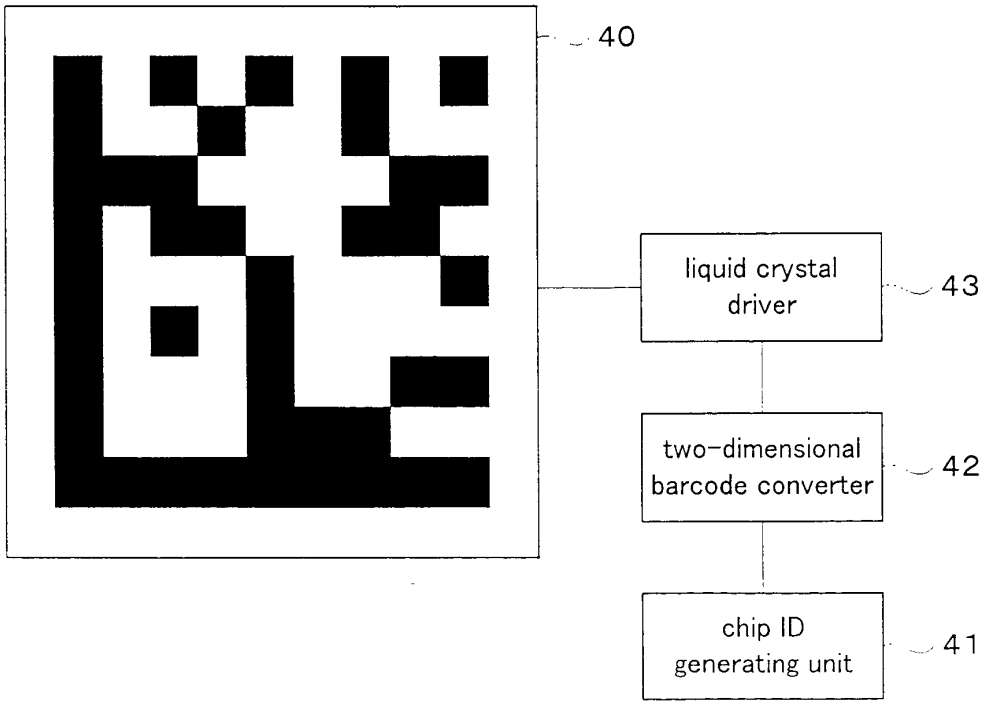
40
liquid crystal driver
43
two-dimensional barcode converter
42
chip ID generating unit
41

FIG. 5

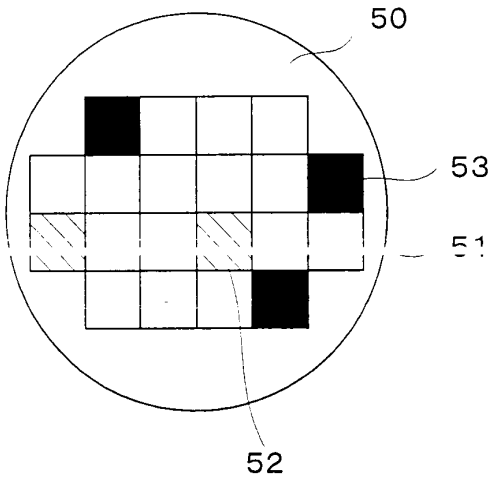
50
53
51
52

FIG. 6

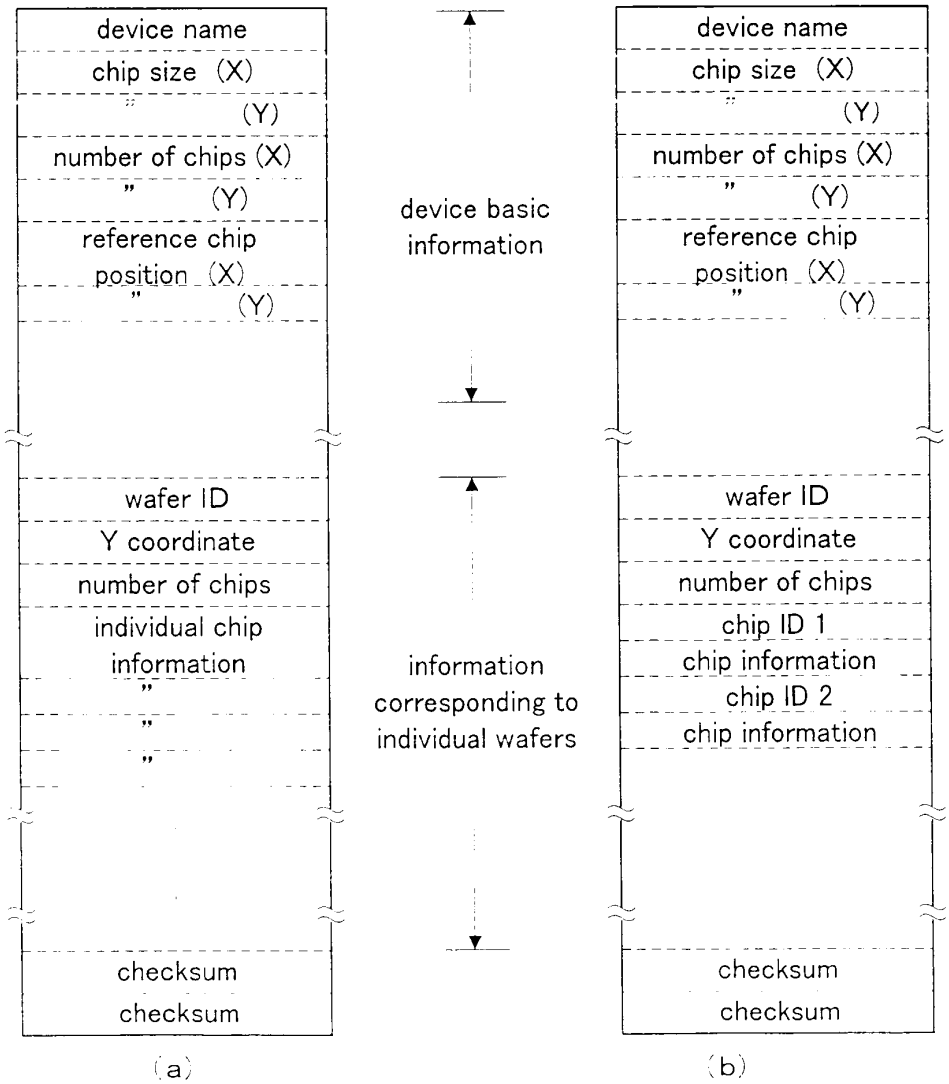
device name
chip size (X)
" (Y)
number of chips (X)
" (Y)
reference chip position (X)
" (Y)
wafer ID
Y coordinate
number of chips
individual chip information
"
"
"
checksum
checksum
device basic information
information corresponding to individual wafers
device name
chip size (X)
" (Y)
number of chips (X)
" (Y)
reference chip position (X)
" (Y)
wafer ID
Y coordinate
number of chips
chip ID 1
chip information
chip ID 2
chip information
checksum
checksum
(a)
(b)

FIG. 7

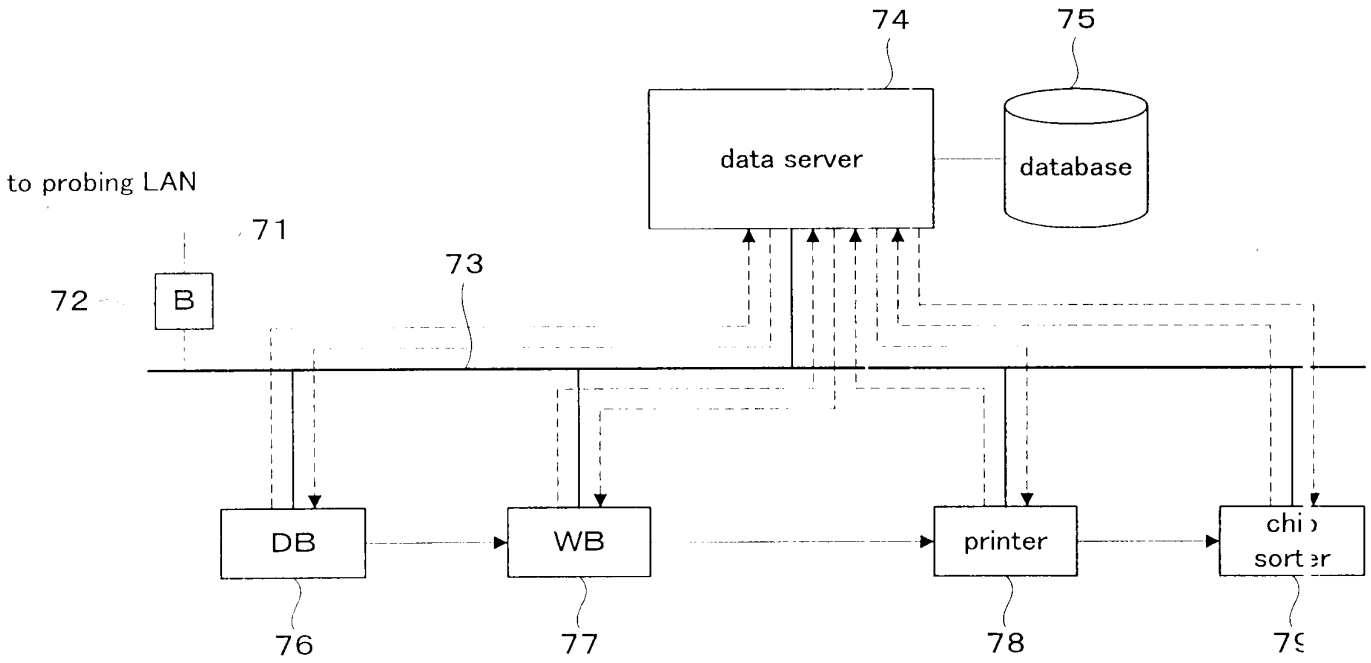
74
75
data server
database
to probing LAN
71
72
B
73
DB
WB
printer
chi
sort er
76
77
78
79

FIG. 8

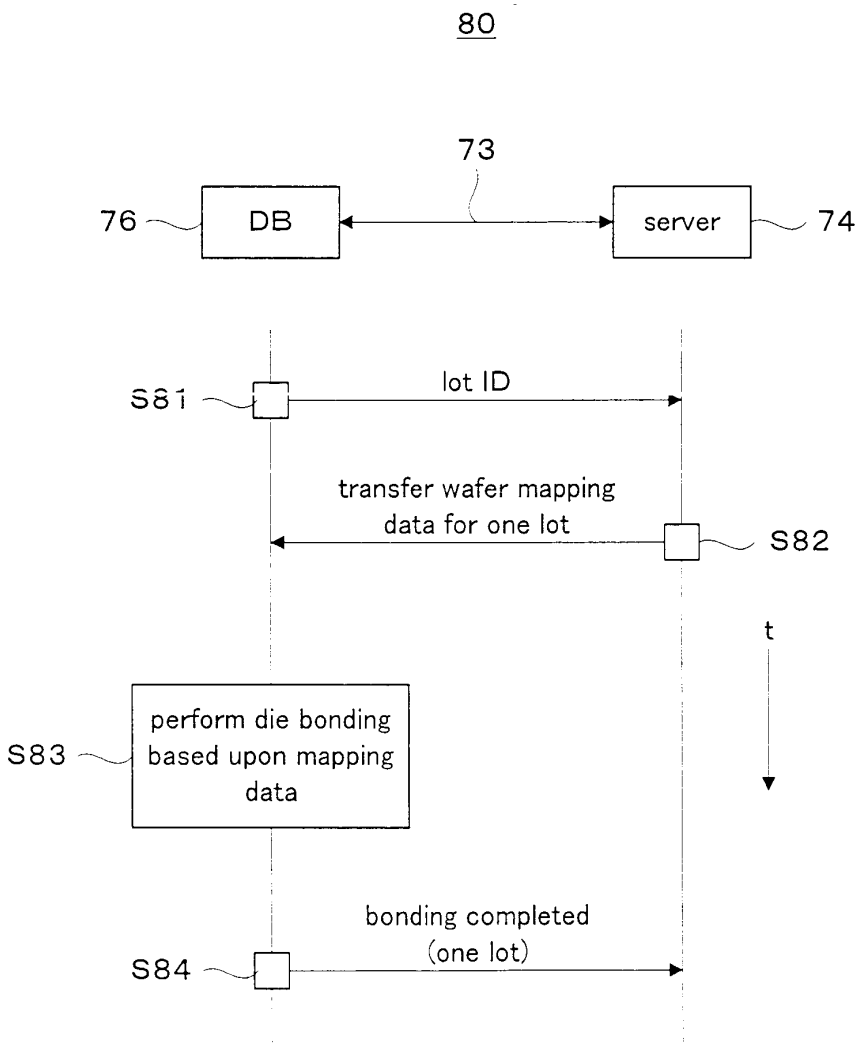
80
73
76
DB
server
74
S81
lot ID
transfer wafer mapping
data for one lot
S82
t
S83
perform die bonding
based upon mapping
data
bonding completed
(one lot)
S84

FIG. 9

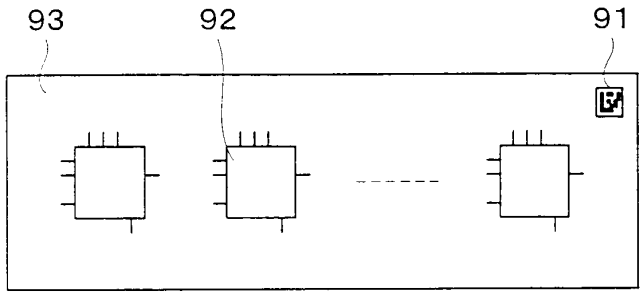

FIG. 11

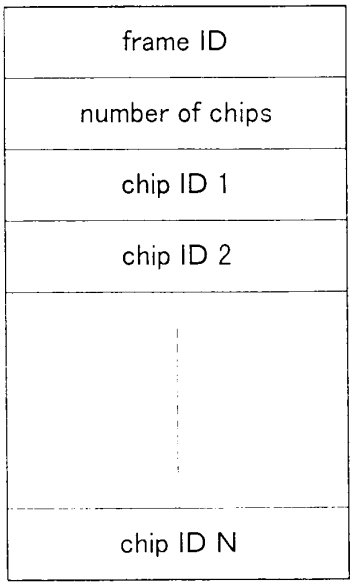

FIG. 10

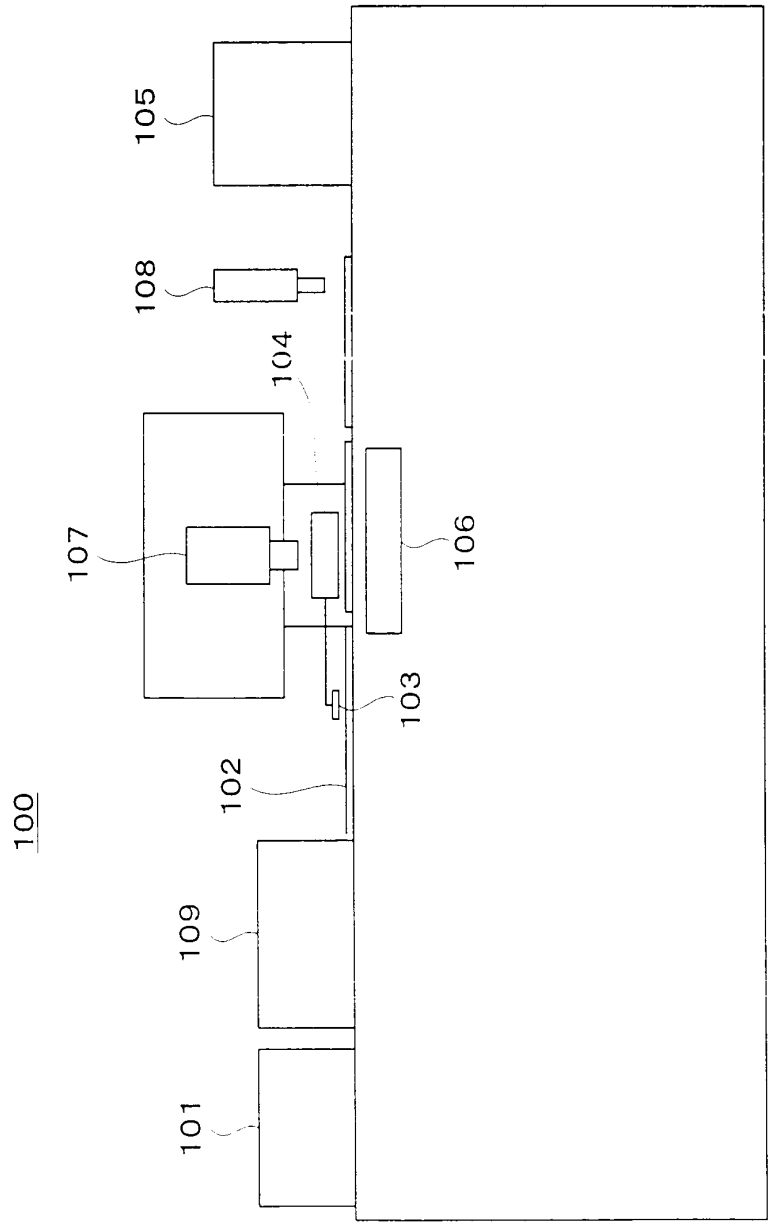

FIG. 12

chip ID	* * * * *	product code	* * * * * * * *
		wafer process flow No.	* * * * * *
		probing category code	* *

process	device type	manufacturing conditions	processing date	processig device	collected data
die bonding	* * * *	bonding conditions * * *	* * * *	* *	* * *
wire bonding	* * * *	wiring pattern * * *	* * * *	* *	* * *
printing	* * * *	printing pattern * * *	* * * *	* *	* * *

FIG. 13

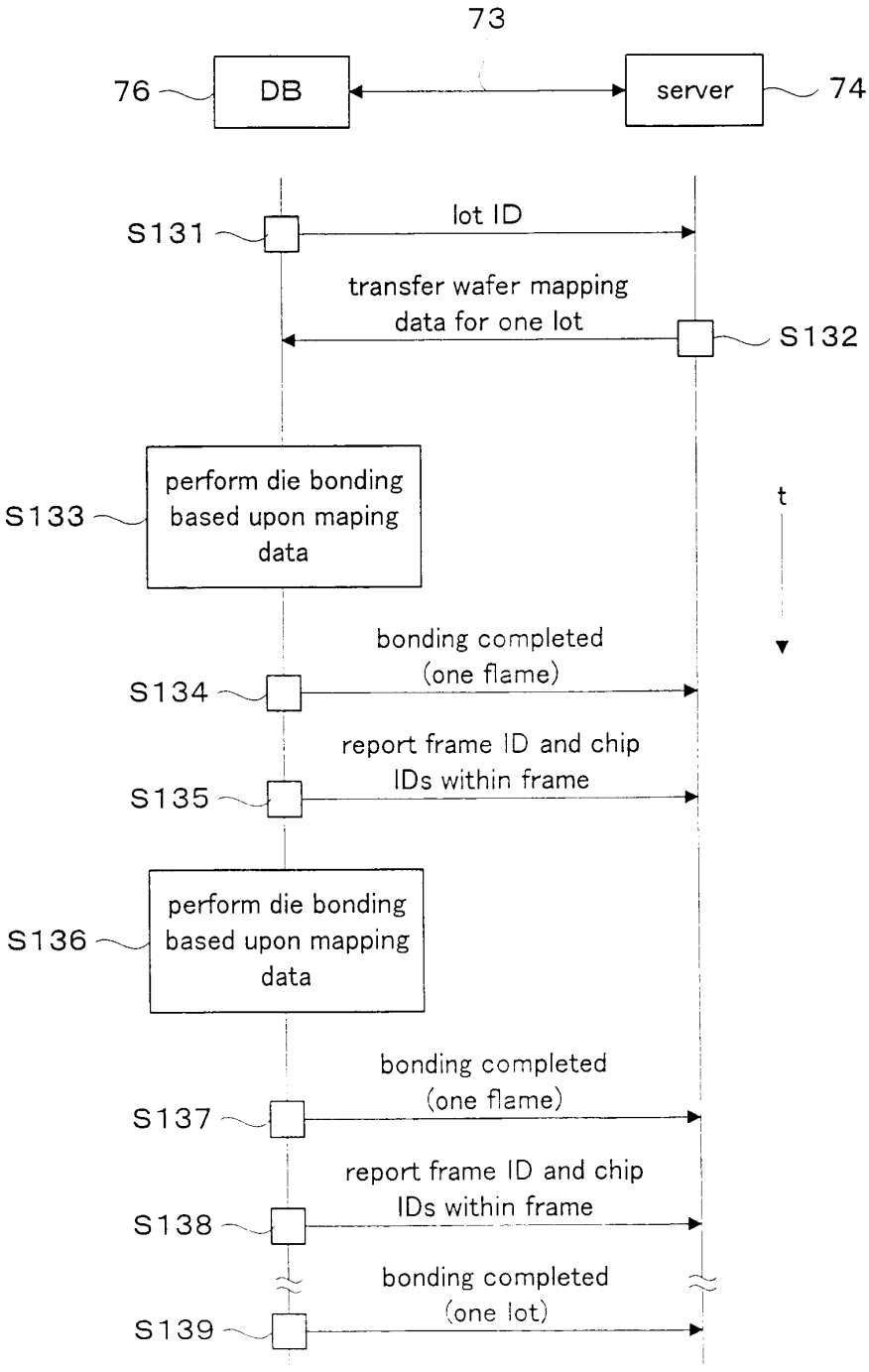
130
73
76
DB
server
74
S131
lot ID
transfer wafer mapping data for one lot
S132
S133
perform die bonding based upon maping data
t
bonding completed (one flame)
S134
report frame ID and chip IDs within frame
S135
S136
perform die bonding based upon mapping data
bonding completed (one flame)
S137
report frame ID and chip IDs within frame
S138
bonding completed (one lot)
S139

FIG. 14

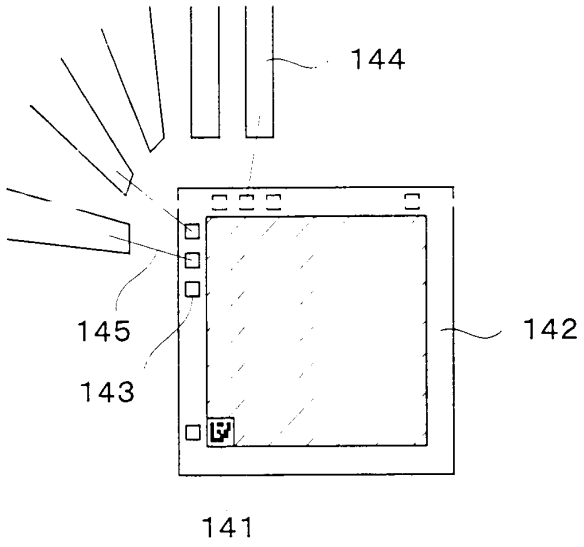
144
145
143
142
141

FIG. 15

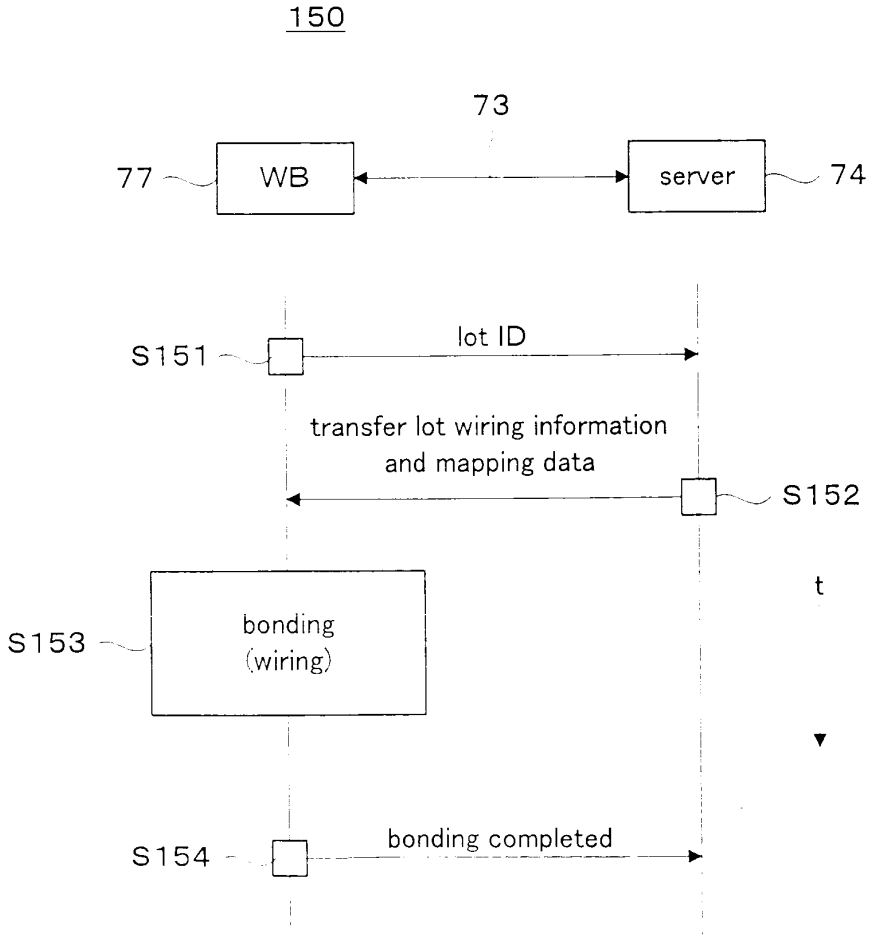
150
73
77
WB
server
74
S151
lot ID
transfer lot wiring information
and mapping data
S152
t
S153
bonding
(wiring)
S154
bonding completed

FIG. 16

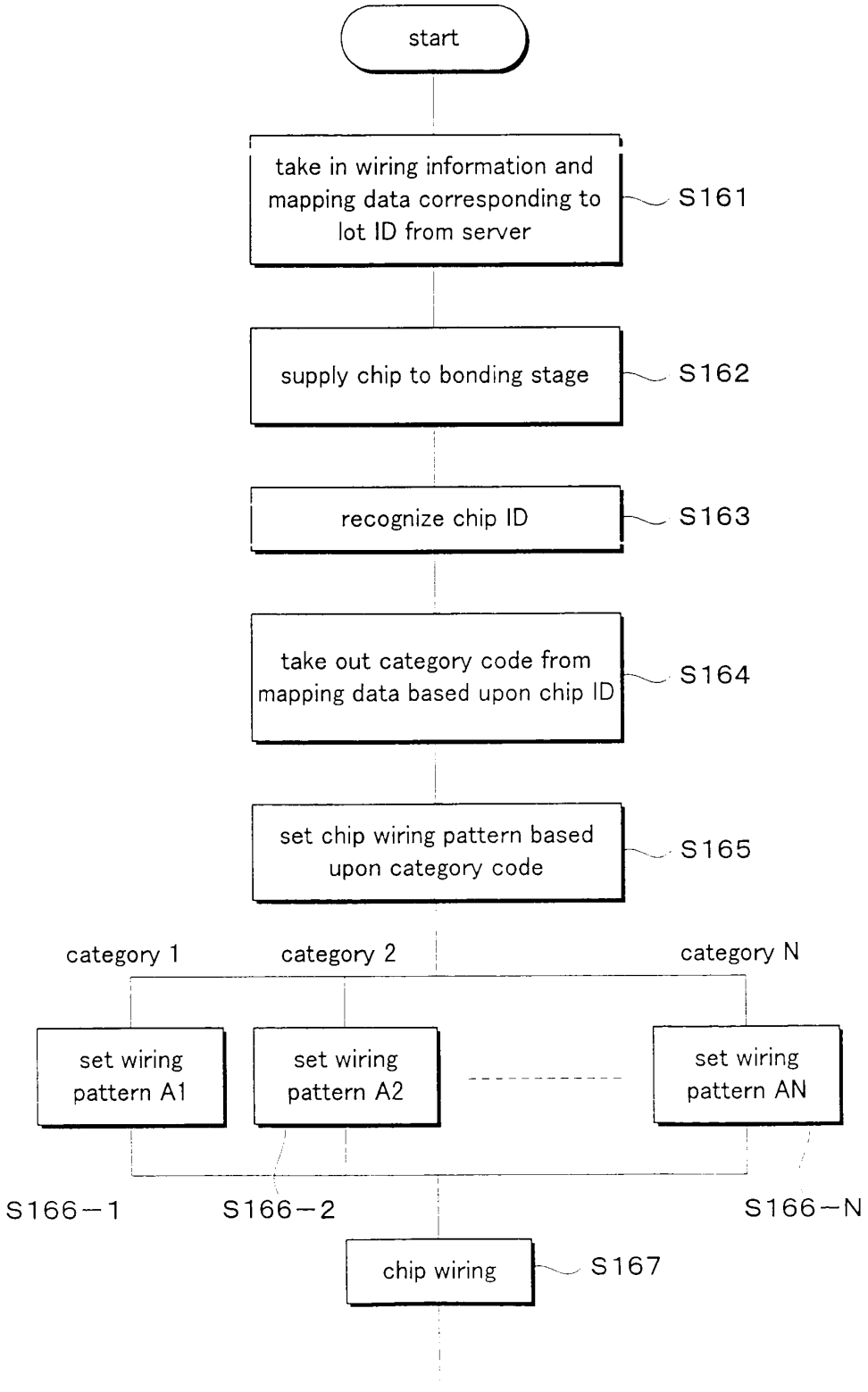
start
take in wiring information and mapping data corresponding to lot ID from server
S161
supply chip to bonding stage
S162
recognize chip ID
S163
take out category code from mapping data based upon chip ID
S164
set chip wiring pattern based upon category code
S165
category 1
category 2
category N
set wiring pattern A1
set wiring pattern A2
set wiring pattern AN
S166−1
S166−2
S166−N
chip wiring
S167

FIG. 17

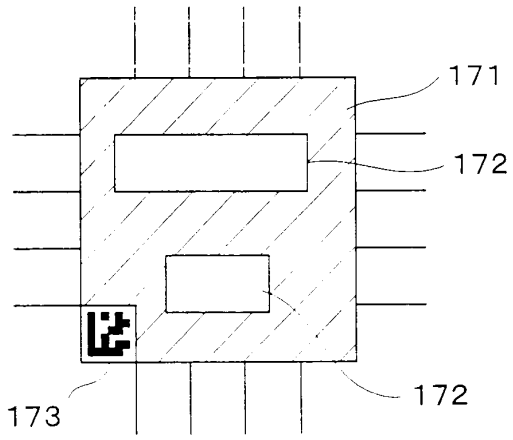

FIG. 18

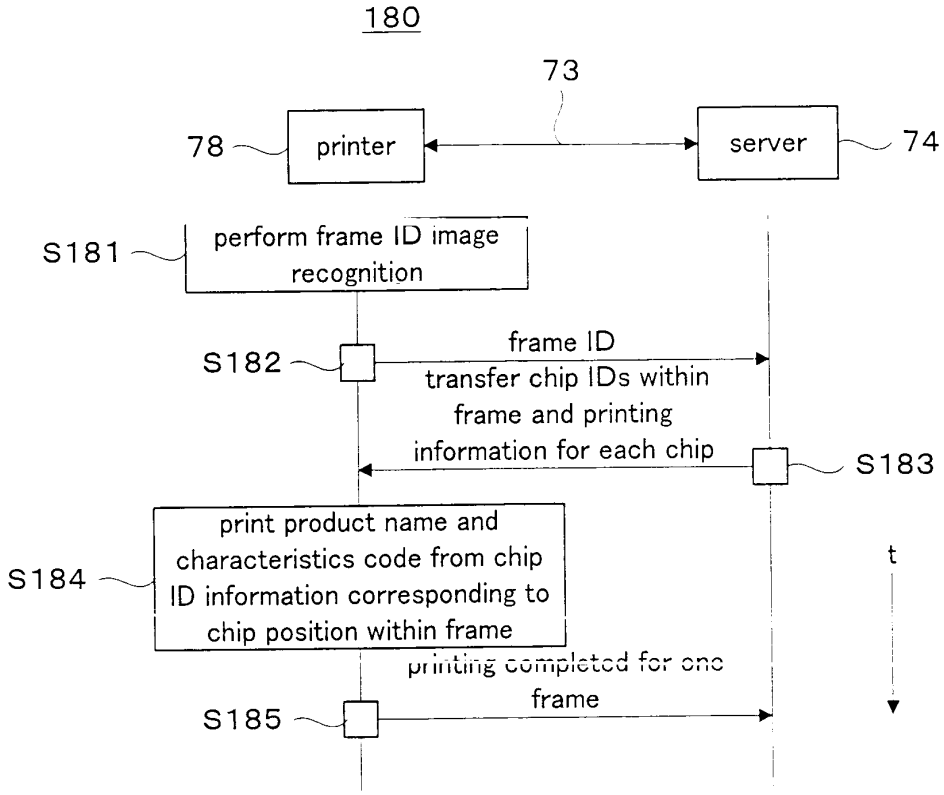
180
73
78
printer
server
74
S181
perform frame ID image recognition
S182
frame ID
transfer chip IDs within frame and printing information for each chip
S183
S184
print product name and characteristics code from chip ID information corresponding to chip position within frame
t
printing completed for one frame
S185

FIG. 19

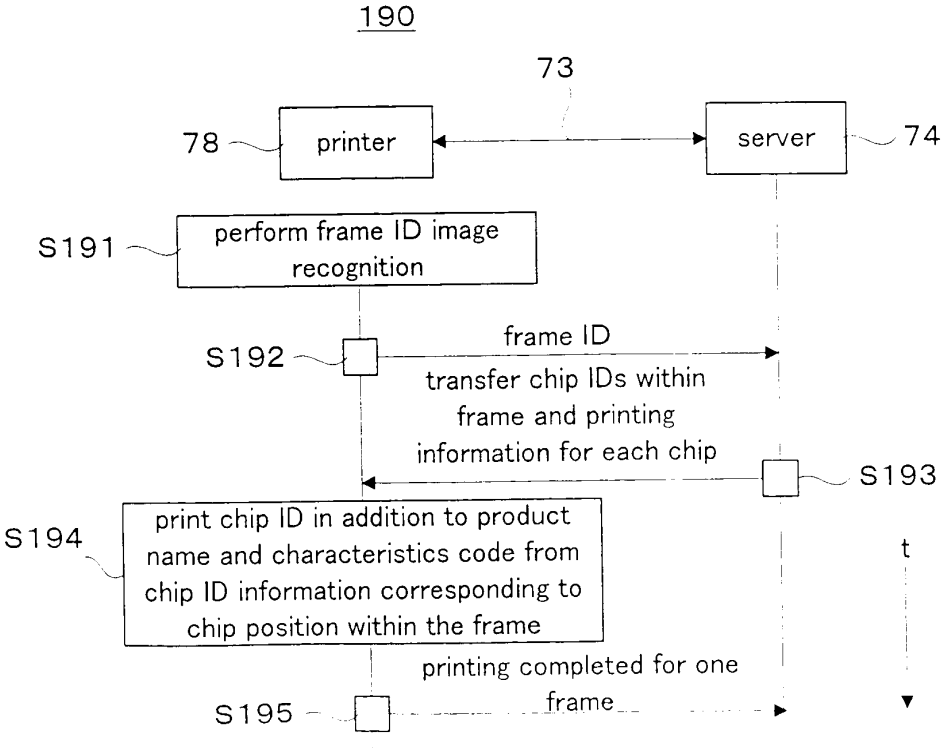
190
73
78
printer
server
74
S191
perform frame ID image recognition
S192
frame ID
transfer chip IDs within frame and printing information for each chip
S193
S194
print chip ID in addition to product name and characteristics code from chip ID information corresponding to chip position within the frame
t
printing completed for one frame
S195

FIG. 20

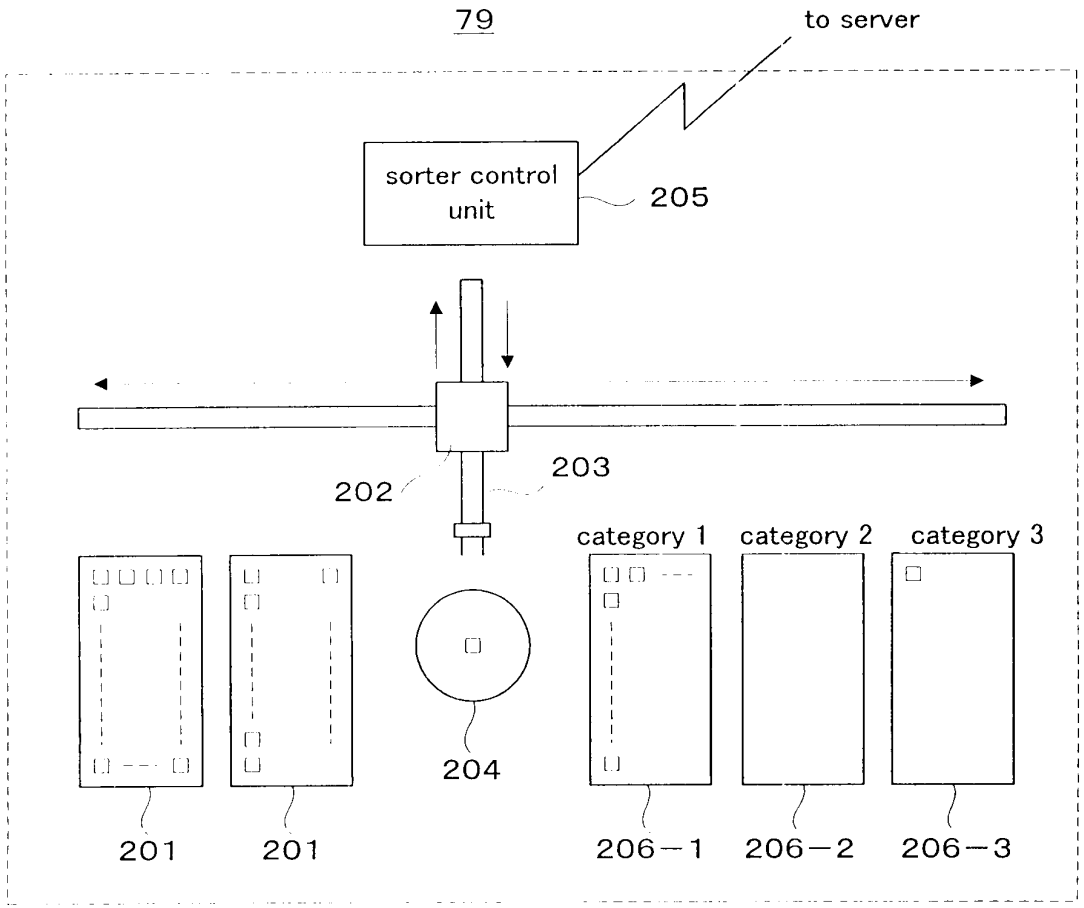
79
to server
sorter control unit
205
202
203
204
category 1
category 2
category 3
201
201
206−1
206−2
206−3

FIG. 21

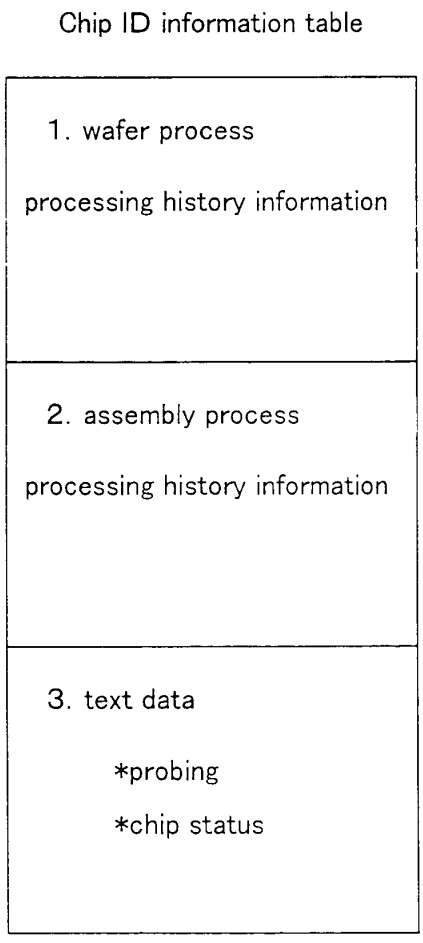
Chip ID information table
1. wafer process
processing history information
2. assembly process
processing history information
3. text data
*probing
*chip status

FIG. 22

Chip ID information table

1. wafer process processing history information
2. assembly process processing history information
3. text data *probing *chip status
4. shipping information shipping destination packaging status shipping data
5. post-shipment field claim information claim history